

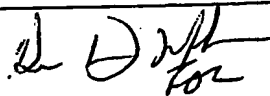
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## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 37906.107289	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US03/31119	International filing date (day/month/year) 02 October 2003 (02.10.2003)	Priority date (day/month/year) 03 October 2002 (03.10.2002)
International Patent Classification (IPC) or national classification and IPC IPC(7): B01D 46/00 and US Cl.: 055/385.6, 385.7, 524, DIG.5; 174 35R, 35MS; 361/816, 818; 427/244		
Applicant LAIRD TECHNOLOGIES, INC.		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>3</u> sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of <u>2</u> sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the report</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of report with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>		
Date of submission of the demand 03 May 2004 (03.05.2004)	Date of completion of this report 29 September 2004 (29.09.2004)	
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/ US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer Duane S. Smith  Telephone No. 571-272-0987	

**I. Basis of the report****1. With regard to the elements of the international application:\***

- ☐ the international application as originally filed.
- ☒ the description:  
pages 1-17 as originally filed  
pages NONE, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_.
- ☒ the claims:  
pages NONE, as originally filed  
pages NONE, as amended (together with any statement) under Article 19  
pages NONE, filed with the demand  
pages 18-24, filed with the letter of 24 August 2004 (24.08.2004)
- ☒ the drawings:  
pages 1-10, as originally filed  
pages NONE, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_.
- ☐ the sequence listing part of the description:  
pages NONE, as originally filed  
pages NONE, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_.

**2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.**

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

**3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:**

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

**4. ☒ The amendments have resulted in the cancellation of:**

- ☒ the description, pages NONE
- ☒ the claims, Nos. 2
- ☒ the drawings, sheets/fig NONE

**5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\***

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/US03/31119**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. STATEMENT**

Novelty (N)

Claims 1,3-36 YESClaims NONE NO

Inventive Step (IS)

Claims 1,3-36 YESClaims NONE NO

Industrial Applicability (IA)

Claims 1,3-36 YESClaims NONE NO**2. CITATIONS AND EXPLANATIONS**

Claims 1, and 3-36 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest the claimed features of an air filter having electromagnetic energy absorptive characteristics including a porous substrate and an electrically absorptive material distributed substantially uniformly through the porous substrate, the electrically absorptive material being an electrical absorber in particulate form suspended in a binding agent nor the method of forming such an air filter. The closest prior art of record to Pierce (US Patent No. 5,431,974) and Hedrick et al (US Patent No. 5,506,047) disclose electromagnetic energy adsorptive filters but differ from the instant invention in that they fail to recite the feature of an electrically absorptive material distributed substantially uniformly through the porous substrate, the electrically absorptive material being an electrical absorber in particulate form suspended in a binding agent. Pierce and Hedrick et al only disclose a coated electrically conductive layer and not an electrically conductive material distributed through a porous substrate wherein the material is an electrical absorber in particulate form suspended in a binding agent. Thus the instant invention is both novel and unobvious over the prior art of record.

Claims 1 and 3-36 meet the criteria set out in PCT Article 33(4), and thus the instant invention has industrial applicability because the subject matter claimed can be made or used in industry.